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10 20 30 40
MNK PIT PST YVR CLN VGL IRK LSD FID PQE GWK KLA VAI KKP

50 60 70 80
SGD DRY NQF HIR RFE ALL QTG KSP TSE LLF DWG TTN CTA GDL

90 100 110 120
VDL LIQ NEF FAP ASL LLP DAV PKT ANT LPS KEA ITV QOK QMP

130 140 150 160
FCD KDR TLM TPV QNL EQS YMP PDS SSP ENK SLE VSD TRF HSF

170 180 190 200 210
SFY ELK NVT NNF DER PIS VGG NKM GEG GFG VVY KGY VNN TTV

220 230 240 250
AVK KLA AMV DIT TEE LKQ QFD QEI KVM AKC QHE NLV ELL GFS

260 270 280 290
SDG DDL CLV YVY MPN GSL LDR LSC LDG TPP LSW HMR CKI AQG

300 310 320 330
AAN GIN FLH ENH HIH RDI KSA NIL LDE AFT AKI SDF GLA RAS

340 350 360 370
EKF AQT VMT SRI VGT TAY MAP EAL RGE ITP KSD IYS FGV VLL

380 390 400 410 420
EII TGL PAV DEH REP QLL LDI KEE IED EEK TIE DYI DKK MND

430 440 450 460
ADS TSV EAM YSV ASQ CLH EKK NKR PDI KKV QQL LQE MTA S*

FIG. 1.

10					20					30					40									
ATG	AAC	AAA	CCC	ATA	ACA	CCA	TCA	ACA	TAT	GTG	CGC	TGC	CTC											
M	N	K	P	I	T	P	S	T	Y	V	R	C	L											
50					60					70					80									
AAT	GTT	GGA	CTA	ATT	AGG	AAG	CTG	TCA	GAT	TTT	ATT	GAT	CCT											
N	V	G	L	I	R	K	L	S	D	F	I	D	F											
90					100					110					120									
CAA	GAA	GGA	TGG	AAG	AAG	TTA	GCT	GTA	GCT	ATT	AAA	AAA	CCA											
Q	E	G	W	K	K	L	A	V	A	I	K	K	P											
130					140					150					160									
TCT	GGT	GAT	GAT	AGA	TAC	AAT	CAG	TTT	CAC	ATA	AGG	AGA	TTT											
S	G	D	D	R	Y	N	Q	F	H	I	R	R	F											
170					180					190					200					210				
GAA	GCA	TTA	CTT	CAA	ACT	GGA	AAA	AGT	CCC	ACT	TCT	GAA	TTA											
E	A	L	L	Q	T	G	K	S	P	T	S	E	L											
220					230					240					250									
CTG	TTT	GAC	TGG	GGC	ACC	ACA	AAT	TGC	ACA	GCT	GGT	GAT	CTT											
L	F	D	W	G	T	T	N	C	T	A	G	D	L											
260					270					280					290									
GTG	GAT	CTT	TTG	ATC	CAA	AAT	GAA	TTT	TTT	GCT	CCT	GCG	AGT											
V	D	L	L	I	Q	N	E	F	F	A	P	A	S											
300					310					320					330									
CTT	TTG	CTC	CCA	GAT	GCT	GTT	CCC	AAA	ACT	GCT	AAT	ACA	CTA											
L	L	L	P	D	A	V	P	K	T	A	N	T	L											
340					350					360					370									
CCT	TCT	AAA	GAA	GCT	ATA	ACA	GTT	CAG	CAA	AAA	CAG	ATG	CCT											
P	S	K	E	A	I	T	V	Q	Q	K	Q	M	P											
380					390					400					410					420				
TTC	TGT	GAC	AAA	GAC	AGG	ACA	TTG	ATG	ACA	CCT	GTG	CAG	AAT											
F	C	D	K	D	R	T	L	M	T	P	V	Q	N											

FIG. 2A.

430 440 450 460
 CTT GAA CAA AGC TAT ATG CCA CCT GAC TCC TCA AGT CCA GAA
 L E Q S Y M P P D S S S P E

470 480 490 500
 AAT AAA AGT TTA GAA GTT AGT GAT ACA CGT TTT CAC AGT TTT
 N K S L E V S D T R F H S F

510 520 530 540
 TCA TTT TAT GAA TTG AAG AAT GTC ACA AAT AAC TTT GAT GAA
 S F Y E L K N V T N N F D E

550 560 570 580
 CGA CCC ATT TCT GTT GGT GGT AAT AAA ATG GGA GAG GGA GGA
 R P I S V G G N K M G E G G

590 600 610 620 630
 TTT GGA GTT GTA TAT AAA GGC TAC GTA AAT AAC ACA ACT GTG
 F G V V Y K G Y V N N T T V

640 650 660 670
 GCA GTG AAG AAG CTT GCA GCA ATG GTT GAC ATT ACT ACT GAA
 A V K K L A A M V D I T T E

680 690 700 710
 GAA CTG AAA CAG CAG TTT GAT CAA GAA ATA AAA GTA ATG GCA
 E L K Q Q F D Q E I K V M A

720 730 740 750
 AAG TGT CAA CAT GAA AAC TTA GTA GAA CTA CTT GGT TTC TCA
 K C Q H E N L V E L L G F S

760 770 780 790
 AGT GAT GGA GAT GAC CTC TGC TTA GTA TAT GTT TAC ATG CCT
 S D G D D L D L V Y V Y M P

800 810 820 830 840
 AAT GGT TCA TTG CTA GAC AGA CTC TCT TGC TTG GAT GGT ACT
 N G S L L D R L S C L D G T

FIG. 2B.

850 860 870 880
 CCA CCA CTT TCT TGG CAC ATG AGA TGC AAG ATT GCT CAG GGT
 P P L S W H M R C K I A Q G

890 900 910 920
 GCA GCT AAT GGC ATC AAT TTT CTA CAT GAA AAT CAT CAT ATT
 A A N G I N F L H E N H H I

930 940 950 960
 CAT AGA GAT ATT AAA AGT GCA AAT ATC TTA CTG GAT GAA GCT
 H R D I K S A N I L L D E A

970 980 990 1000
 TTT ACT GCT AAA ATA TCT GAC TTT GGC CTT GCA CGG GCT TCT
 F T A K I S D F G L A R A S

1010 1020 1030 1040 1050
 GAG AAG TTT GCC CAG ACA GTC ATG ACT AGC AGA ATT GTG GGA
 E K F A Q T V M T S R I V G

1060 1070 1080 1090
 ACA ACA GCT TAT ATG GCA CCA GAA GCT TTG CGT GGA GAA ATA
 T T A Y M A P E A L R G E I

1100 1110 1120 1130
 ACA CCC AAA TCT GAT ATT TAC AGC TTT GGT GTG GTT TTA CTA
 T P K S D I Y S F G V V L L

1140 1150 1160 1170
 GAA ATA ATA ACT GGA CTT CCA GCT GTG GAT GAA CAC CGT GAA
 E I I T G L P A V D E H R E

1180 1190 1200 1210
 CCT CAG TTA TTG CTA GAT ATT AAA GAA GAA ATT GAA GAT GAA
 P Q L L L D I K E E I E D E

1220 1230 1240 1250 1260
 GAA AAG ACA ATT GAA GAT TAT ATT GAT AAA AAG ATG AAT GAT
 E K T I E D Y I D K K M N D

FIG. 2C.



5/11

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1270					1280					1290					1300				
GCT	GAT	TCC	ACT	TCA	GTT	GAA	GCT	ATG	TAC	TCT	GTT	GCT	AGT						
A	D	S	T	S	V	E	A	M	Y	S	V	A	S						
1310					1320					1330					1340				
CAA	TGT	CTG	CAT	GAA	AAG	AAA	AAT	AAG	AGA	CCA	GAC	ATT	AAG						
Q	C	L	H	E	K	K	N	K	R	P	D	I	K						
1350				1360				1370				1380							
AAG	GTT	CAA	CAG	CTG	CTG	CAA	GAG	ATG	ACA	GCT	TCT	TAA							
K	V	Q	Q	L	L	Q	E	M	T	A	S						*>		

FIG. 2D.

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10	20	30	40
MNK PLT PST YIR NLN VGI LRK LSD FID PQE GWK KLA VAI KKP			
50	60	70	80
SGD DRY NQF HIR RFE ALL QTG KSP TCE LLF DWG TTN CTV GDL			
90	100	110	120
VDL LVQ IEL FAP ATL LLP DAV PQT VKS LPP REA ATV AQT HGP			
130	140	150	160
CQE KDR TSV MPM PKL EHS CEP PDS SSP DNR SVE SSD TRF HSF			
170	180	190	200
SFH ELK SIT NNF DEQ PAS AGG NRM GEG GFG VVY KGC VNN TIV			
220	230	240	250
AVK KLG AMV KIS TEE LKQ QFD QEI KVM ATC QHE NLV ELL GFS			
260	270	280	290
SDG DNL CLV YAY MPN GSL LDR LSC LDG TPP LSW HTR CKV AQG			
300	310	320	330
TAN GIR FLH ENH HIH RDI KSA NIL LDK DFT AKI SDF GLA RAS			
340	350	360	370
ARL AQT VMT SRI VGT TAY MAP EAL RGE ITP KSD IYS FGV VLL			
380	390	400	410
ELI TGL AAV DEN REP QLL LDI KEE IED EEK TIE DYT DEK MSD			
430	440	450	460
ADP ASV EAM YSA ASQ CLH EKK NRR PDI AKV QQL LQE MSA *			

FIG. 3.

10 20 30 40
 GCG GCC GCG TCG ACA TGC CCC GGT GAC CCG CAG CAT CCC GAT
 50 60 70 80
 CGC AGG CAG TCT GAA GTC GCC TGG TGG TCC TGC GTC CTC CAC
 90 100 110 120
 CCC CGA GTC CTC GCC GGA CGT GGC GGG ACG CCG ATC GCC TTG
 130 140 150 160
 TCC AGG AAG CGA GGG ACG TCC GAG AGG AAG TAG AAG ATG AAC
 M N
 170 180 190 200 210
 AAG CCG TTG ACA CCA TCG ACA TAC ATA CGC AAC CTT AAT GTG
 K P L T P S T Y I R N L N V
 220 230 240 250
 GGG ATC CTT AGG AAG CTG TCG GAT TTT ATT GAT CCT CAA GAA
 G I L R K L S D F I D P Q E
 260 270 280 290
 GGG TGG AAG AAA TTA GCA GTA GCT ATC AAA AAG CCG TCC GGC
 G W K K L A V A I K K P S G
 300 310 320 330
 GAC GAC AGA TAC AAT CAG TTC CAT ATA AGG AGA TTC GAA GCC
 D D R Y N Q F H I R R F E A
 340 350 360 370
 TTA CTT CAG ACC GGG AAG AGC CCC ACC TGT GAA CTG CTG TTT
 L L Q T G K S P T C E L L F
 380 390 400 410 420
 GAC TGG GGC ACC ACG AAC TGC ACA GTT GGC GAC CTT GTG GAT
 D W G T T N C T V G D L V D
 430 440 450 460
 CTA CTG GTC CAG ATT GAG CTG TTT GCC CCC GCC ACT CTC CTG
 L L V Q I E L F A P A T L L

FIG. 4A.



8/11

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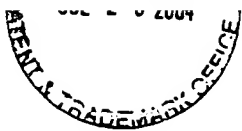
470					480					490					500									
CTG	CCG	GAT	GCC	GTT	CCC	CAA	ACC	GTC	AAA	AGC	CTG	CCT	CCT											
L	P	D	A	V	P	Q	T	V	K	S	L	P	P											
510					520					530					540									
AGA	GAA	GCG	GCA	ACA	GTG	GCA	CAA	ACA	CAC	GGG	CCT	TGT	CAG											
R	E	A	A	T	V	A	Q	T	H	G	P	C	Q											
550					560					570					580									
GAA	AAG	GAC	AGG	ACA	TCC	GTA	ATG	CCT	ATG	CCG	AAG	CTA	GAA											
E	K	D	R	T	S	V	M	P	M	P	K	L	E											
590					600					610					620					630				
CAC	AGC	TGC	GAG	CCA	CCG	GAC	TCC	TCA	AGC	CCA	GAC	AAC	AGA											
H	S	C	E	P	P	D	S	S	S	P	D	N	R											
640					650					660					670									
AGT	GTA	GAG	TCC	AGC	GAC	ACT	CGG	TTC	CAC	AGC	TTC	TCG	TTC											
S	V	E	S	S	D	T	R	F	H	S	F	S	F											
680					690					700					710									
CAT	GAA	CTG	AAG	AGC	ATC	ACA	AAC	AAC	TTC	GAC	GAG	CAA	CCC											
H	E	L	K	S	I	T	N	N	F	D	E	Q	P											
720					730					740					750									
GCG	TCT	GCC	GGT	GGC	AAC	CGG	ATG	GGA	GAG	GGG	GGA	TTT	GGA											
A	S	A	G	G	N	R	M	G	E	G	G	F	G											
760					770					780					790									
GTG	GTG	TAC	AAG	GGC	TGT	GTG	AAC	AAC	ACC	ATC	GTG	GCG	GTG											
V	V	Y	K	G	C	V	N	N	T	I	V	A	V											
800					810					820					830					840				
AAG	AAG	CTC	GGA	GCG	ATG	GTT	GAA	ATC	AGT	ACT	GAA	GAA	CTA											
K	K	L	G	A	M	V	E	I	S	T	E	E	L											
850					860					870					880									
AAG	CAA	CAG	TTT	GAT	CAA	GAA	ATT	AAA	GTA	ATG	GCA	ACG	TGT											
K	Q	Q	F	D	Q	E	I	K	V	M	A	T	C											

FIG. 4B.

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890				900				910				920							
CAG	CAC	GAG	AAC	CTG	GTG	GAG	CTG	CTC	GGC	TTC	TCC	AGC	GAC						
Q	H	E	N	L	V	E	L	L	G	F	S	S	D						
930				940				950				960							
AGC	GAC	AAC	CTG	TGC	TTA	GTG	TAT	GCT	TAC	ATG	CCC	AAC	GGG						
S	D	N	L	C	L	V	Y	A	Y	M	P	N	G						
970				980				990				1000							
TCC	TTG	CTG	GAC	AGA	CTG	TCC	TGC	CTG	GAT	GGT	ACA	CCA	CCG						
S	L	L	D	R	L	S	C	L	D	G	T	P	P						
1010				1020				1030				1040				1050			
CTT	TCC	TGG	CAC	ACA	AGG	TGC	AAG	GTT	GCT	CAG	GGG	ACA	GCA						
L	S	W	H	T	R	C	K	V	A	Q	G	T	A						
1060				1070				1080				1090							
AAT	GGC	ATC	AGG	TTT	CTG	CAT	GAA	AAT	CAT	CAC	ATT	CAT	AGA						
N	G	I	R	F	L	H	E	N	H	H	I	H	R						
1100				1110				1120				1130							
GAT	ATT	AAA	AGT	GCA	AAT	ATC	TTA	CTA	GAC	AAA	GAC	TTT	ACT						
D	I	K	S	A	N	I	L	L	D	K	D	F	T						
1140				1150				1160				1170							
GCC	AAA	ATA	TCT	GAC	TTT	GGG	CTT	GCA	CGG	GCT	TCG	GCA	AGG						
A	E	I	S	D	F	G	L	A	R	A	S	A	R						
1180				1190				1200				1210							
CTA	GCG	CAG	ACG	GTC	ATG	ACC	AGC	CGA	ATC	GTG	GGC	ACA	ACG						
L	A	Q	T	V	M	T	S	R	I	V	G	T	T						
1220				1230				1240				1250				1260			
GCT	TAC	ATG	GCA	CCC	GAA	GCT	TTG	CGG	GGA	GAA	ATA	ACA	CCC						
A	Y	M	A	P	E	A	L	R	G	E	I	T	P						
1270				1280				1290				1300							
AAA	TCT	GAC	ATC	TAC	AGC	TTC	GGC	GTG	GTT	CTG	TTG	GAG	CTG						
K	S	D	I	Y	S	F	G	V	V	L	L	E	L						

FIG. 4C.



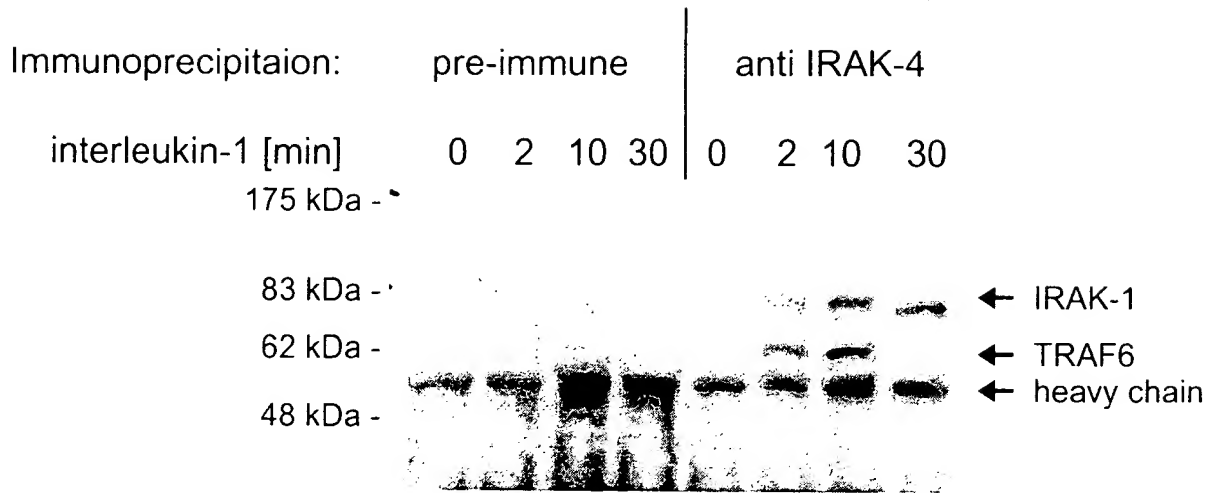
10/11

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1310	1320	1330	1340	
ATA ACC GGG CTG	GCG GCT GTG GAT	GAA AAC CGT	GAA CCT CAA	
I T G L	A A V D	E N R	E P Q	
1350	1360	1370	1380	
CTA CTG CTG GAT	ATT AAA GAA GAG	ATT GAA GAT	GAA GAG AAG	
L L L D	I K E E	I E D	E E K	
1390	1400	1410	1420	
ACG ATT GAA GAT	TAC ACG GAT GAG	AAG ATG AGC	GAT GCG GAC	
T I E D	Y T D E	K M S	D A D	
1430	1440	1450	1460	1470
CCT GCT TCG GTG	GAA GCA ATG TAC	TCT GCT GCT	AGC CAG TGT	
P A S V	E A M Y	S A A	S Q	C
1480	1490	1500	1510	
CTG CAT GAG AAG	AAA AAC AGA CGG	CCA GAC ATT	GCA AAG GTT	
L H E K	K N R R	P D I	A K V	
1520	1530	1540		
CAA CAG CTG CTA	CAA GAG ATG TCT	GCT TAA		
Q Q L L	Q E M S	A * >		

FIG. 4D.

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WB: anti IRAK-1 and anti TRAF6



WB: anti IRAK-4

FIG. 5.

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